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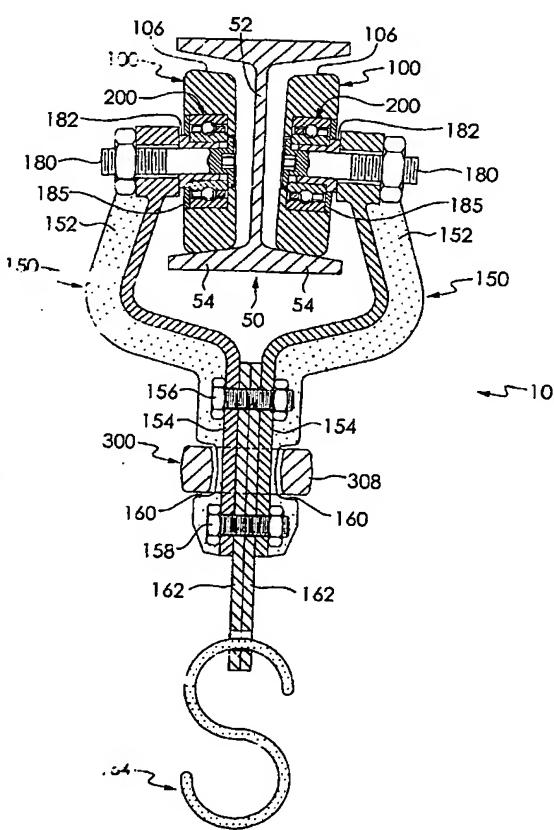
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(54) Title: SELF-LUBRICATING OVERHEAD CONVEYOR SYSTEM



(57) Abstract: Described is a self-lubricating, overhead conveyor system and the component parts thereof. The self-lubricating overhead conveyor system obviates the need for added lubricants, and comprises three main components: a trolley assembly, a conveyor chain and a turn wheel assembly. In one embodiment, all three components are integrated to provide an improved overhead conveyor system; however, individual components may be used to retrofit conventional overhead conveyor systems. The trolley assemblies contain a self-lubricating precision ball bearing assembly, and are joined together by a surface hardened conveyor chain internally treated to resist corrosion and eliminate flaking. The turn wheel assemblies are configured to engage the conveyor chain and provide continuous lubrication and cleaning to the conveyor chain. All components of the conveyor system of the present disclosure meet criteria established by the United States Department of Agriculture (USDA) for use in food processing applications.



Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B61B 11/00, 3/00, 7/00; B61C 13/00
US CL : 105/148

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 105/148, 150, 154; 104/89, 93; 184/15.1, 17; 384/463, 470; 474/161, 162, 207

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No .
Y	US 4,993,328 A (WENDT ET AL) 19 FEBRUARY 1991, see entire document.	1-47
Y	US 5,947,260 A (SORBARA ET AL) 07 September 1999, see entire document.	1-3,5,9-12,16- 21,25,28,29,36-45
Y	US 5,357,868 A (MAAS) 25 October 1994, see entire document.	6-8
Y,E	US 6,702,091 B2 (NIMMO ET AL) 09 MARCH 2004, see entire document.	27
Y,P	US 6,569,816 B2 (OOHIRA ET AL) 27 May 2003, see entire document.	13

Further documents are listed in the continuation of Box C.

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Continuation of B. FIELDS SEARCHED Item 3:
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